

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1.(currently amended) A method for casting a polyacrylamide gel in a plastic gel enclosure, said method comprising

(a) forming an aqueous solution of a monomer mixture comprising acrylamide, a crosslinking agent, and an oxygen scavenger which is a member selected from the group consisting of sodium sulfite, sodium bisulfite, sodium thiosulfate, sodium lignosulfate, ammonium bisulfite, hydroquinone, diethylhydroxyethanol, diethylhydroxylamine, methylethylketoxime, ascorbic acid, erythorbic acid, and sodium erythorbate; and

(b) polymerizing said monomer mixture in a an uncoated plastic gel enclosure to form a polyacrylamide gel.

2.(original) A method in accordance with claim 1 in which said monomer mixture further comprises a free radical initiator.

3.(original) A method in accordance with claim 1 in which said oxygen scavenger is a member selected from the group consisting of sodium sulfite, sodium bisulfite, sodium thiosulfate, sodium lignosulfate, and ammonium bisulfite.

4.(original) A method in accordance with claim 1 in which said oxygen scavenger is a member selected from the group consisting of sodium sulfite and sodium bisulfite.

5.(original) A method in accordance with claim 1 in which said oxygen scavenger is sodium sulfite.

6.(original) A method in accordance with claim 1 in which the concentration of said oxygen scavenger in said aqueous solution is from about 1 mM to about 30 mM.

7.(original) A method in accordance with claim 3 in which the concentration of said oxygen scavenger in said aqueous solution is from about 1 mM to about 30 mM.

8.(original) A method in accordance with claim 3 in which the concentration of said oxygen scavenger in said aqueous solution is from about 3 mM to about 15 mM.

9.(currently amended) A method in accordance with claim 1 in which said plastic gel enclosure is a member selected from the group consisting of polycarbonate, polystyrene, ~~styrene~~styrene-acrylonitrile copolymer, polyethylene terephthalate, polyethylene terephthalate glycolate, and poly(ethylene naphthalenedicarboxylate).

10.(currently amended) A method in accordance with claim 1 in which said monomer mixture comprises acrylamide and N,N'-methylene-bisacrylamide in aqueous solution, the total of said acrylamide and N,N'-methylene-bisacrylamide amounting to from about 5 g to about 30 ~~g per milliliter~~ % of said aqueous solution.

11.(currently amended) A method in accordance with claim 1 in which said monomer mixture comprises acrylamide and N,N'-methylene-bisacrylamide at a combined concentration of from about 10 g to about 20 ~~g per milliliter~~ % of said aqueous solution.

12.(original) A method in accordance with claim 12 in which the weight ratio of acrylamide to N,N'-methylene-bisacrylamide is from about 10:1 to about 100:1.

13.(original) A method in accordance with claim 10 in which the weight ratio of acrylamide to N,N'-methylene-bisacrylamide is from about 25:1 to about 50:1.